



Duquesne Light

Our Energy...Your Power

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December 23, 2010

VIA OVERNIGHT MAIL

Ms. Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120

**Re: Implemenetation of the Alternative Energy Portfolio Standards Act of 2004;
Standards for the Participation of Demand Side Management Resources –
Technical Reference Manual 2011 Update.
Docket No. M-00051865**

Dear Secretary Chiavetta:

Enclosed for filing are an original and 15 copies of the comments of Duquesne Light Company in the above-referenced proceeding.

Sincerely yours,

Gary A. Jack
Assistant General Counsel

Enclosures

c: Gregory A. Shawley (w/enc.)
Kriss Brown (w/enc.)

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Re: Implementation of the Alternative :
Energy Portfolio Standards Act of 2004 : **Docket No. M-00051865**
Standards for the Participation of Demand
Side Management Resources – Technical :
Reference Manual 2011 Update :

**COMMENTS OF
DUQUESNE LIGHT COMPANY**

I. INTRODUCTION

In implementing the Alternative Energy Portfolio Standards Act (“AEPS Act”), 73 P.S. §§ 1648.1-1648.8, the Pennsylvania Public Utility Commission (“Commission”) had previously adopted an Energy Efficiency and Demand Side Management (“DSM”) Rules for Pennsylvania’s Alternative Energy Portfolio Standard, Technical Reference Manual (“TRM”) at Docket No. M-00051865. In adopting the original version of the TRM, the Commission directed the Bureau of Conservation, Economics and Energy Planning (“CEEP”) to oversee the implementation, maintenance and periodic updating of the TRM in an Order entered January 16, 2009 implementing the energy efficiency and conservation (“EE&C”) program requirements of Act 129 of 2008, 66 Pa. C.S. 2806.1 (“Implementation Order”).

Soon after the Implementation Order, the Commission staff initiated a collaborative process to review and update the TRM with the purpose of supporting both the AEPS Act and the Act 129 EE&C program that culminated in the adoption of the 2009 version of the TRM at the May 28, 2009 Public Meeting. Adopting the 2009 version of the TRM also made the Commission recognize the importance of updating the TRM on an annual basis. By an Annual Update Tentative Order entered November 24, 2010 at Docket No. M-00051865, the Commission advanced the second annual update of the TRM proposed to be applied beginning with the 2011-2012 AEPS Act and Act 129 EE&C program compliance years.

Duquesne Light Company ("Duquesne") submits the following comments in response to the November 2010 TRM Annual Update Tentative Order.

II. GENERAL COMMENTS

Duquesne supports the comments filed by the Energy Association of Pennsylvania ("EAPA") and provides hereby further insight on the Tentative Order draft TRM as discussed in more detail below. We understand the Commission seeks comments on how to fairly address the tradeoff between the use of baseline data derived from more recent data reflecting a more current assessment of energy savings and the possibility that such adjustments may require greater market penetration to meet mandated goals. This is an extremely important issue because Duquesne has built and implemented its Energy Efficiency Program around the 2009 TRM and selected its programs and budget allocations based on those deemed savings. Duquesne believes that the best answer, based on everyone's reliance on those baseline assumptions, is not to adopt or make effective until June 1, 2013 any changes that affect EE plan savings. Accordingly, utilities would not need to revamp their programs, request PUC approval, and implement changes based on the TRM changes if this recommendation was adopted. If that is unacceptable to the Commission and it wishes to adopt the TRM changes now, then Duquesne would request that the tie or requirement that these new proposed changes to the 2011 TRM be used as part of measuring the savings or eligibility for the Energy Efficiency programs be rescinded until at least June 1, 2013 as an alternative. Finally, if that is unacceptable to the Commission, then Duquesne requests the effective date of the changes be made at such a future date beyond the time it would take to revamp the programs and budgets, seek PUC approval for the changes, and fully implement the changes. Duquesne would suggest that the minimum timing would be one year after the effective date of any new TRM. Other areas of concern are listed below.

III. SPECIFIC COMMENTS

CFL Reduction

Duquesne does not agree with the proposed reduction from 3.0 hours to 1.9 hours, a 40% decrease, for the hour burn time for residential compact fluorescent lamp (CFL) measures. The proposed 1.9 hours is based primarily on an evaluation of energy efficiency program impacts in California that is very different in many respects from Pennsylvania. Weather, saturation of CFL usage, individual customer traits and characteristics, hours of daylight, electric rates, and income levels are just a few of the factors that affect burn time for CFLs. Duquesne believes that California is drastically different in these factors and in others and therefore is not a comparable market to Pennsylvania on CFL burn time. States across the country have varying adopted burn times — from below the current PA standard of 3.0 to above. Before Pennsylvania alters its standard, it should perform additional research and study on an appropriate burn time standards and determine after that research whether any change is warranted.

Nonetheless, since any change (either upward or downward) would have a real impact on PA electric utilities' Energy Efficiency Plans, the effective date of any change should not be before June 1, 2013. Otherwise, it will result in sizeable shifts in programs and budgetary dollars — all of which require evaluation, PUC approval, and implementation ramp-up. It also would jeopardize the progress and possible success of any EE plan.

Refrigerator/Freezer Retirement and Recycling

Duquesne does not agree with the proposed changes in the TRM for refrigerator/freezer retirement and recycling. A similar philosophy to the CFL burn hours discussion exists because consistency in baseline assumptions is necessary, or at least extremely helpful, when implementing an approved EE&C Plan. The deemed savings per refrigerator/freezer should remain constant for the duration of the EE&C Plan, which is until the end of May 2013. Time is needed for EDCs to adjust programs, to renegotiate CSP contracts, to adjust budgets to reflect revised savings (higher or lower), and

to seek Commission approval of changes that shift costs within a sector (between programs) or shift costs between customer sectors.

Even if there is agreement on the effective date of any TRM change as discussed above, Duquesne does not agree with the updated savings estimate proposed in the 2011 TRM. The 2011 TRM references the Refrigerator Retirement Savings Calculator on the ENERGY STAR website for the updated savings estimate. Duquesne submits that the calculator is meant to provide end users with an idea about energy usage but is not accurate for TRM calculation purposes. The Commission should specifically reevaluate and study this change before acting on it.

In addition to changing the deemed savings value for refrigerator/freezer recycling, the 2011 TRM proposes to add several new eligibility requirements:

1. The refrigerator/freezer must be at least 10 years old, and
2. The refrigerator/freezer must be a secondary unit that is not replaced.

Changing the eligibility requirements now to require the appliance to be at least 10 years old and be a secondary unit should not be adopted. Many customers do not know the age of their refrigerator/freezer as they don't keep records that long or in a readily obtainable form. The 10 year cutoff is arbitrary and not based on achieved savings. And regardless of whether it is primary or secondary appliance replacement, it is an energy efficiency reduction that should be counted.

Procedurally, Duquesne does not agree to the change at this time as much of its residential program is built on a refrigerator/freezer replacement and recycling program. To change the rules in the middle of the program could drastically affect the results of the programs. There is no need to adopt these changes immediately. Any change should await until after the expiration of the Energy Efficiency programs as Duquesne and others relied on the TRM savings rates when constructing their programs and allocating budget dollars.

C & I HVAC Baseline Efficiencies

Changing baseline efficiencies for air source heat pumps and central air conditioners will have an impact on Duquesne's programs as many of its measures for small and medium C & I customers is related to HVAC equipment. Duquesne disagrees with the change substantively because the changes reflected in the proposed TRM Table 3-21: HVAC Baseline Efficiencies are referenced to IECC 2009 and ASHRE 90.1-2007 for minimum Energy Efficiency Ratio (EER) values for air-source air conditioners and air-source heat pumps (cooling). Duquesne respectfully submits ASHRAE 90.1-2007 is applicable to new construction and major retrofit projects subject to new construction codes and standards. Consistent with the Commission's Order authorizing Duquesne's EE&C Plan, Duquesne's program portfolio does not include any new construction programs. The revised values exceed current minimum federal standards for single package heat pumps and air conditioners that are applicable to existing building retrofit projects and programs. The TRM should not impose the referenced ASHRAE standards on retrofit projects and programs; any changes to published minimum (baseline) HVAC efficiencies, at a minimum, should differentiate between retrofit and new construction program activity.

Procedurally, Duquesne disagrees with implementing any change prior to June 1, 2013 for the reasons stated above and particularly because Duquesne relied on the prior (2009) TRM savings numbers in constructing its programs and allocating budget dollars.

Federal Changes to Baseline Data

The Commission seeks comments on how it should account for baseline changes caused by federal legislation/regulation. In Duquesne's view, it will probably be difficult or perhaps unlawful for the Commission to ignore or not adopt in some fashion the federal baseline changes, unless Pennsylvania can show substantive reasons why they should not apply to circumstances in the state. Duquesne is not aware of such distinguishing circumstances. Therefore, while it is difficult for the Commission to reject these federal changes, reasonable timing of adoption is within the PUC's purview. The federal changes,

if agreed to be appropriate for the state, should be adopted sometime after June 1, 2013 so that existing EE plans are not adversely affected.

Addition of New Measures and Clarifications

Duquesne agrees with the PUC adding new energy efficiency measures to the TRM for both residential and Commercial/Industrial. The new measures are appropriate. In fact, Duquesne has requested permission to amend its Energy Efficiency Plan on September 15, 2010 in Docket No. M-2009-2093217 to adopt a number of the new energy efficiency measures proposed in the TRM.

Additionally, the 2011 TRM proposes a number of clarifications which seem appropriate for adoption.

Quantifying Annual Hours of Operation

In Section 3.2.6 of the proposed 2011 TRM, lighting projects with savings of less than 50 kW have stipulated whole building hours of use, according to Table 3-5. [Proposed 2011 TRM at p. 133.] Duquesne believes that some projects may achieve significantly different savings than those implied by the Equivalent Full Load Hours of operation for the average unit (“EFLH”) levels listed in Table 3-5. If the EFLH levels are known for projects with savings less than 50 kW, such values should be allowed and usable, or should be permitted to be based on the more detailed usage groups in Table 3-1 and Table 3-2.

3.2.6, Projects with connected load savings less than 50kW: “For lighting projects with savings less than 50kW, stipulated whole building hours of use will be used as shown below in Table 3-5. If more detailed information is available about building type use area or DFLH, such values may be allowed or usable or based on the more detailed usage groups in Table 3-1 or 3-2.”

Table 3-2 Modification

Duquesne Light recommends several additions to table 3-2 in order to expand and complete the manufacturing building type. The proposed revised table 3-2 is attached as Appendix A to these comments. We have added 1, 2 and 3 Industrial Manufacturing [production] Shifts because the hours of operation for each are significantly different. When Table 3-2 content was provided to the TRM Technical Working Group, the table included these building types, and Duquesne believes this building

type definition was inadvertently removed. Additionally, in practice we find that many, if not all, manufacturing facilities contain both production use areas and office use areas. Duquesne suggests adding an Industrial Manufacturing Office use group to address this since they are often large and have very different hours of use when compared to production use area EFLH. The EFLH value reflected for the requested Industrial Manufacturing Office use area should adopt an average of Table 3-2 all Office – Large EFLH values (2641 and 2692 hours

Refrigerated Spaces

The proposed 2011 TRM Table 3-5 lists default values of EFLH and coincidence factor (“CF”) for warehouses, storage conditioned and storage unconditioned, and many more facilities. However, there is no “building type” listed for Refrigerated Warehouses. Refrigerated warehouses are common in every EDC territory in the form of large distribution warehouses where food products are stored for distribution to regional food stores and restaurants. Most TRMs include the Refrigerated Warehouse building type, but it is missing from both the proposed TRM Tables 3-2 and 3-5. The addition of the Refrigerated Warehouse building type will enable identification and savings calculations associated with lighting instead of estimation or logged separately. We recommend a building type be added to both proposed TRM Tables 3-2 and 3-5 to facilitate use of the TRM Appendix C Lighting Audit and Design Tool interactive factors defined in proposed TRM Table 3.6 and an addition of a category “Storage – Refrigerated.”

Table 3-5 Modification

The proposed 2011 TRM table 3-5 provides an “other” category. It requires a measure analysis of EFLH, which in turn requires interviews supplemented by logging hours of use. Duquesne recommends that a default EFLH and CF be adopted for “other” that is an average of all of the building types in the table. This change would be helpful because without it there could be numerous spaces that do not fit readily into specified building types but have small energy savings potential. The requirements

for logging hours of use when savings are below 50 kW for a project may discourage participation in energy savings programs.

Demand Response – Residential Air Conditioning

The proposed 2011 TRM excludes demand response programs. It is understood that the commercial/industrial demand response programs are being addressed separately with reliance on PJM protocols.

Residential demand response applications in the 2010 TRM included a value for air conditioner cycling at .72 kW per unit. The load reduction impact for a program was based on the energy saved in one hour in kW times the number of units in the program times the number of hours that the measure operated. In light of the requirement for load reductions during the highest 100 hours in the summer season of 2012, the load reduction value per unit for air conditioners should be retained. Duquesne's residential demand program is geared towards this and there is no reason not to count the demand reduction from the air conditioning program.

III. CONCLUSION

Duquesne supports the proposed clarifications and does not object to minor changes in the 2011 TRM. But substantial changes that affect the baseline assumptions, the approval, and the implementation of ongoing EE & C Plans, as discussed above, should not be made at this time. Duquesne appreciates the opportunity to comment on this matter and requests that the Commission accept the suggestions noted above and incorporate them into a final order.



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Appendix A

The four proposed additions are in red, below.

Table 3-2: Hours of Use for Usage Groups

Building Type	Usage Group	Equivalent Full Load Hours
Education - Primary School	Classroom/Lecture	2445
Education - Primary School	Exercising Centers and Gymnasium	2051
Education - Primary School	Dining Area	1347
Education - Primary School	Kitchen and Food Preparation	1669
Education - Secondary School	Classroom/Lecture	2445
Education - Secondary School	Office (General)	2323
Education - Secondary School	Exercising Centers and Gymnasium	2366
Education - Secondary School	Computer Room (Instructional/PC Lab)	2137
Education - Secondary School	Dining Area	2365
Education - Secondary School	Kitchen and Food Preparation	1168
Education - Community College	Classroom/Lecture	2471
Education - Community College	Office (General)	2629
Education - Community College	Computer Room (Instructional/PC Lab)	2189
Education - Community College	Comm/Ind Work (General, Low Bay)	3078
Education - Community College	Dining Area	2580
Education - Community College	Kitchen and Food Preparation	2957
Education - University	Classroom/Lecture	2522
Education - University	Office (General)	2870
Education - University	Computer Room (Instructional/PC Lab)	2372
Education - University	Comm/Ind Work (General, Low Bay)	3099
Education - University	Dining Area	2963
Education - University	Kitchen and Food Preparation	3072
Education - University	Hotel/Motel Guest Room (incl. toilets)	1196

Building Type	Usage Group	Equivalent Full Load Hours
Education - University	Corridor	2972
Grocery	Retail Sales, Grocery	4964
Grocery	Office (General)	4526
Grocery	Comm/Ind Work (Loading Dock)	4964
Grocery	Refrigerated (Food Preparation)	4380
Grocery	Refrigerated (Walk-in Freezer)	4380
Grocery	Refrigerated (Walk-in Cooler)	4380
Hospitals	Office (General)	4873
Hospitals	Dining Area	5858
Hospitals	Kitchen and Food Preparation	5858
Hospitals	Medical and Clinical Care	5193
Hospitals	Laboratory, Medical	4257
Hospitals	Medical and Clinical Care	5193
Lodging - Hotel	Hotel/Motel Guest Room (incl. toilets)	799
Lodging - Hotel	Corridor	7884
Lodging - Hotel	Dining Area	3485
Lodging - Hotel	Kitchen and Food Preparation	4524
Lodging - Hotel	Bar, Cocktail Lounge	3820
Lodging - Hotel	Lobby (Hotel)	7884
Lodging - Hotel	Laundry	4154
Lodging - Hotel	Office (General)	3317
Lodging - Motel	Hotel/Motel Guest Room (incl. toilets)	755
Lodging - Motel	Office (General)	5858
Lodging - Motel	Laundry	4709
Lodging - Motel	Corridor	7474
Industrial Manufacturing – 1 Shift	1 Shift	2857
Industrial Manufacturing – 2 Shift	2 Shift	4730
Industrial Manufacturing – 3 Shift	3 Shift	6631

Building Type	Usage Group	Equivalent Full Load Hours
Industrial Manufacturing	Office	2665 ¹
Manufacturing - Light Industrial	Comm/Ind Work (General, High Bay)	3068
Manufacturing - Light Industrial	Storage (Unconditioned)	3376
Office - Large	Office (Open Plan)	2641
Office - Large	Office (Executive/Private)	2641
Office - Large	Corridor	2641
Office - Large	Lobby (Office Reception/Waiting)	2692
Office - Large	Conference Room	2692
Office - Large	Copy Room (photocopying equipment)	2692
Office - Large	Restrooms	2692
Office - Large	Mechanical/Electrical Room	2692
Office - Small	Office (Executive/Private)	2594
Office - Small	Corridor	2594
Office - Small	Lobby (Office Reception/Waiting)	2594
Office - Small	Conference Room	2594
Office - Small	Copy Room (photocopying equipment)	2594
Office - Small	Restrooms	2594
Office - Small	Mechanical/Electrical Room	2594
Restaurant - Sit-Down	Dining Area	4836
Restaurant - Sit-Down	Lobby (Main Entry and Assembly)	4836
Restaurant - Sit-Down	Kitchen and Food Preparation	4804
Restaurant - Sit-Down	Restrooms	4606
Restaurant - Fast-Food	Dining Area	4850
Restaurant - Fast-Food	Lobby (Main Entry and Assembly)	4850
Restaurant - Fast-Food	Kitchen and Food Preparation	4812
Restaurant - Fast-Food	Restrooms	4677

¹ EFLH value is an average of all Office – Large values 2641 and 2692 hours.

Building Type	Usage Group	Equivalent Full Load Hours
Retail - 3-Story Large	Retail Sales and Wholesale Showroom	3546
Retail - 3-Story Large	Storage (Conditioned)	2702
Retail - 3-Story Large	Office (General)	2596
Retail - Single-Story Large	Retail Sales and Wholesale Showroom	4454
Retail - Single-Story Large	Storage (Conditioned)	2738
Retail - Single-Story Large	Office (General)	2714
Retail - Single-Story Large	Auto Repair Workshop	3429
Retail - Single-Story Large	Kitchen and Food Preparation	3368
Retail - Small	Retail Sales and Wholesale Showroom	3378
Retail - Small	Storage (Conditioned)	2753
Storage - Conditioned	Storage (Conditioned)	3441
Storage - Conditioned	Office (General)	3441
Storage - Unconditioned	Storage (Unconditioned)	3441
Storage - Unconditioned	Office (General)	3441